

Page 5, lines 2-20, delete "The above first ... layers is improved" and insert --The above first object is achieved by improving the chromaticity of light emitted from blue fluorescent substance layers. This is achieved by setting the chromaticity coordinate y (the CIE color specification) of light to 0.07 or less or the peak wavelength of a spectrum of light to 453 nm or less when vacuum ultraviolet rays are radiated onto the blue cells to excite the blue fluorescent substances.

Such an improvement in the chromaticity of light emitted from blue fluorescent substance layers as described above increases the color temperature of light (white balance) when the light is emitted from all the cells, and improves the color reproduction.

The above PDP having a superior chromaticity of light emitted from blue fluorescent substance layers is produced by performing the bonding process while steam vapor is forced to exhaust from the inner space by, for example, circulating a dry gas in the inner space.

The above PDP is also produced by performing a preparative heating step before the bonding process, where in the preparative heating step, a front panel and a back panel are heated in an atmosphere of dry gas while a space is opened between the sides of the panels facing each other. Alternatively, the above PDP is produced by performing a heating step before the bonding process, where in the bonding process, where in the heating step, a panel is heated while an MgO layer formed on the panel is in contact with a dry gas.

The above improvement is achieved by the production method of the present invention since it prevents blue fluorescent substances from being degraded by heat by reducing the amount of water preserved in the inner space. In contrast, in a conventional PDP production method, the blue

fluorescent substances are degraded by heat of water emitted in the inner space in the bonding process, resulting in degradation of the light-emitting intensity and the chromaticity of emitted light.

The above PDP whose blue fluorescent substance layers emit light with a superior chromaticity is also produced by performing the bonding process, after a while, heating the bonded panels to a certain temperature while circulating a dry gas in the inner space, and starting an exhausting step.

With the above construction, even if the chromaticity of light emitted from the blue fluorescent substance layers is degraded by heat of the water in the bonding process, the chromaticity is recovered since the water is removed from the inner space as the dry gas is circulated in the inner space while the bonded panels are heated to the certain temperature.

Here, the "dry gas" indicates a gas containing steam vapor with lower partial pressure than the typical partial pressure. It is preferable to use an air processed to be dried (dry air).

It is desirable that the partial pressure of the steam vapor in the dry gas atmosphere is set to 15Torr or less, more preferably to 10Torr or less, 5Torr or less, 1Torr or less, 0.1Torr or less. It is desirable that the dew-point temperature of the dry gas is set to 20°C or lower, more preferably to 10°C or lower, 0°C or lower, -20°C or lower, -40°C or lower.--

IN THE CLAIMS:

Please cancel Claims 1-5, 8-12, 14-15, 18-21, 24, 28, 53-56, 61-62, 65-69, 71-72, 74-77, 79, 81, 84-98, and 100-108 without prejudice.

Please amend the claims as follows:

Claim 6, line 1, delete "5" and insert --112--;

line 2, before "performed" insert --further--;